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09/871,118	05/31/2001	Mary Lucille DeLucia	KCC-14,859	9826

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ROSSI, JESSICA

[REDACTED] ART UNIT

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1733

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*B*

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application N .	Applicant(s)
	09/871,118	DELUCIA ET AL.
	Examiner Jessica L. Rossi	Art Unit 1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 4/28/03, Election.

2a) This action is **FINAL**.                  2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-41 is/are pending in the application.

4a) Of the above claim(s) 30-41 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-4,6-15,17-26,28 and 29 is/are rejected.

7) Claim(s) 5,16 and 27 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 31 May 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .	6) <input checked="" type="checkbox"/> Other: claims from 09/871,171 .

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I, claims 1-29, in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Drawings***

2. The drawings are objected to because Figure 1 shows reference number 45, which is never mentioned in the specification. The examiner believes that this reference number denotes apertures in the film layer, which are not disclosed in the present invention but are disclosed in US Serial no. 09/871,171 (same inventive entity). It appears that this was an inadvertent error, so it is suggested that Applicants delete reference number 45. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, it recites the limitation "the creped first layer" in line 2. There is insufficient antecedent basis for this limitation in the claim because claim 1 is silent as to

crimping. It is suggested to amend claim 6 to state --creping the first layer and stabilizing the creped first layer by bonding the second layer to said creped first layer--.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4, 7, 24-26, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaiser et al. (US 5491016).

With respect to claim 1, Kaiser is directed to forming a structured composite material that can be used in disposable garments, such as diapers, for accommodating the passage of fluids through it (column 1, lines 8-17; column 4, lines 15-16). The reference teaches forming a first outer fiber layer having a first heat shrinkage extent (column 2, lines 63-65), forming a second outer fiber layer having a second heat shrinkage extent different from the first heat shrinkage extent (column 2, line 66 – column 3, line 2), bonding the first and second layers to form the composite (column 2, lines 15-20), and shrinking the second layer to produce the structured composite material (column 3, lines 58-62).

It is noted that the reference characterizes the first layer as one that does not undergo any “appreciable” heat shrinking during the heating step, which does not have any “significant” thermal effect on the first layer (column 2, lines 64-65; column 3, lines 60-61). The reference makes it clear that the amount of shrinking of the first layer is minimal/negligible in comparison

to the second layer, but this does not change the fact that the first layer does exhibit a heat shrinkage extent, be it a very small one, which is clearly not excluded by the claimed invention.

With respect to claim 24, all the limitations were addressed with respect to claim 1 except applying the second layer to the first layer and heating to shrink. The reference teaches the composite comprising an inner fiber layer sandwiched between two outer fiber layers (column 2, lines 63-67), where the layers are deposited onto each other (column 2, lines 53-55). Therefore, the reference teaches applying the second inner fiber layer to the first outer fiber layer and applying the other first outer fiber layer to the second inner fiber layer. The reference also teaches heating to shrink (column 3, lines 58-62).

Regarding claim 4, the reference teaches heating to shrink.

Regarding claim 7, the reference teaches bonding by thermal bonding (column 2, lines 15-17).

Regarding claim 25, the reference teaches shrinking the first layer (inner fiber layer) relative to the second layer (outer fiber layer deposited onto inner fiber layer).

Regarding claim 26, the reference teaches shrinking the second layer (inner fiber layer) relative to the first layer (outer fiber layer onto which inner fiber layer deposited).

Regarding claim 29, the reference teaches embossing the first layer to form thermal bonds that extend therethrough (column 2, lines 15-17).

7. Claims 11, 14-15, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Pike et al. (EP 0586924; provided in IDS).

With respect to claim 11, Pike is directed to making a structured heterogeneous material to accommodate passage of fluids (p. 7, lines 10-15; p. 7, lines 55-58). The reference teaches

providing a first homogeneous component A having a first shrinkage extent (p. 5, lines 11-13 and 23-30), providing a second homogeneous component B having a second shrinkage extent different from the first (p. 5, lines 23-30), combining the first and second homogeneous components to produce the heterogeneous material (Figure 1; p. 6, lines 2-3), and shrinking the first component to a lesser extent than the second component to form the structured heterogeneous material (p. 5, lines 26-30).

Regarding claim 14, the reference teaches heating to form the structured heterogeneous material (p. 6, lines 40-46).

Regarding claim 15, the reference teaches heating by microwaves or infrared (p. 8, lines 7-8).

Regarding claim 18, the reference teaches component A being a random copolymer (p. 5, lines 30-31).

Regarding claim 19, the reference teaches component B being polypropylene (p. 17, lines 50-52).

Regarding claim 20, the reference teaches the components being melt spun to produce the heterogeneous material (p. 3, lines 34-35).

8. Claims 11, 14, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Srinivasan et al. (EP 0687757).

With respect to claim 11, Srinivasan is directed to making a structured heterogeneous material to accommodate passage of fluids (column 1, lines 14-16). The reference teaches providing a first homogeneous component having a first shrinkage extent, providing a second homogeneous component having a second shrinkage extent different from the first, combining

the first and second homogeneous components to produce the heterogeneous material, and shrinking one component to a greater extent than the other to form the structured heterogeneous material (column 5, lines 52-58).

Regarding claim 14, the reference teaches heating to form the structured heterogeneous material (column 4, lines 14-16).

Regarding claim 19, the reference teaches the second component comprising polypropylene (column 5, lines 56-58).

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in–
  - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
  - (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

10. Claims 1, 4, 7, and 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Bevins et al. (US 6491777).

With respect to claim 1, Bevins is directed to forming a structured composite material that can be used as a transfer layer in disposable garments, such as diapers, for accommodating the passage of fluids through it (abstract; column 5, lines 30-31). The reference teaches extruding fibers to form a first layer 8 having a first shrinkage extent (column 4, lines 3-4), extruding fibers to form a second layer 14 having a second shrinkage extent different from the first (column 4, lines 18-20), bonding the first and second layers to form the composite (column

4, lines 8-12), and shrinking the first layer to a greater extent than the second layer to form the structured composite material (column 4, lines 18-25).

With respect to claim 24, all the limitations were addressed with respect to claim 1 except applying the second layer to the first layer and heating to shrink. The reference teaches extruding the second layer onto the first layer (Figure 1) and heating to shrink (column 4, lines 18-20).

Regarding claim 4, the reference teaches heating to shrink.

Regarding claim 7, the reference teaches thermal bonding (column 4, lines 8-10).

Regarding claim 25, the reference teaches shrinking the first layer relative to the second layer (column 4, lines 20-22).

Regarding claim 26, the reference teaches that the arrangement of the layers can be reversed (column 4, lines 34-36); therefore, the reference teaches shrinking the second layer relative to the first layer.

#### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 11-14, 17, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 6491928).

With respect to claim 11, Smith is directed to making a structured heterogeneous material to accommodate passage of fluids (column 1, lines 12-16; column 20, lines 21-22). The

reference teaches providing a first homogeneous component (scrim) having a shrinkage extent, providing a second homogeneous component (fibers), combining the first and second homogeneous components to produce the heterogeneous material, and shrinking the first component to form the structured heterogeneous material (column 5, lines 15-16; column 6, lines 13 and 33-34; column 7, lines 14-15 and 21-25). The reference is silent as to the second component having a shrinkage extent different from the first.

The skilled artisan would have appreciated that the fibers of Smith are made of materials identical to those claimed/disclosed in the present invention (i.e. polypropylene, polyethylene, and copolymers thereof; column 6, lines 22-23) and therefore would exhibit some degree of shrinkage. Furthermore, the skilled artisan reading the reference as a whole would have appreciated that this shrinkage is minimal in comparison to the scrim (see column 7, lines 21-25) thereby giving the fibers a shrinkage extent different from that of the scrim.

Regarding claims 12-13, the amount of shrinking would have been within purview of the skilled artisan and would have been dictated by the materials selected.

Regarding claim 14, the reference teaches heating to form the structured heterogeneous material (column 4, lines 14-15).

Regarding claim 17, the addition of fillers to fibrous materials is well known and conventional in the art. It would have been obvious to the skilled artisan to add fillers to one of the components of Smith because this allows for the manipulation of the properties of the fibers.

Regarding claim 19, the reference teaches the second component comprising polypropylene (column 6, lines 22-23).

Regarding claim 21, the reference teaches the first component comprising a scrim (column 7, lines 20-25).

13. Claims 15, 18, 20, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Pike et al.

Regarding claim 15, selection of a particular heating source would have been within purview of the skilled artisan at the time the invention was made absent any unexpected results. However, it would have been obvious to use microwave or infrared because such is known in the art, as taught by Pike (p. 8, lines 7-8).

Regarding claims 18, selection of particular materials for the components would have been within purview of the skilled artisan at the time the invention was made depending on the desired characteristics of the finished product. However, it would have been obvious to use a random copolymer for one component and polypropylene for another because such is known in the art, as taught by Pike (p. 5, lines 30-31; p. 17, lines 50-52).

Regarding claims 20 and 22, Smith is silent as to melt spinning the components to produce the heterogeneous material. Selection of a particular method would have been within purview of the skilled artisan absent any unexpected results. However, it would have been obvious to use melt spinning because such is known in the art, as taught by Pike (p. 3, lines 34-35).

Regarding claim 23, the reference teaches the scrim shrinking relative to the fibers (column 7, lines 20-25).

14. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaiser et al. or Bevins et al. in view of Pike et al.

Regarding claim 2, both Kaiser and Bevins are silent as to the first layer comprising propylene and the second layer comprising ethylene-propylene copolymer. Selection of particular materials would have been within purview of the skilled artisan. However, it would have been obvious to use the materials claimed in the present invention because such are known in the art, as taught by Pike (p. 5, lines 30-31).

Regarding claim 3, Kaiser teaches the second layer shrinks relative to the first layer (outer fiber layer onto which inner fiber layer deposited; column 2, lines 53-55). Bevins teaches the second layer shrinks relative to the first layer (column 4, lines 34-36).

15. Claims 8-10 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaiser et al. or Bevins et al. in view of Kurihara et al. (US 5789328).

Regarding claims 8 and 28, Kaiser and Bevins are silent as to stretching the second layer before bonding/applying it to the first layer. It is known in the art to form nonwoven webs by bonding a first fiber layer having a first shrinkage extent to a second fiber layer having a shrinkage extent greater than the first and heating to shrink the layers to form a structured composite where the second layer is stretched before bonding, as taught by Kurihara (column 4, lines 57-65; column 5, lines 5-6 and 15-18; column 8, lines 52-57).

It would have been obvious to the skilled artisan to stretch the second layer of Kaiser or Bevins before bonding/applying because such is known in the art, as taught by Kurihara, where this would further facilitate shrinking of the second layer upon heating.

Regarding claims 9-10, the amount of stretching would have been within purview of the skilled artisan.

16. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bevins et al. in view of Kaiser et al.

Regarding claim 29, Bevins is silent as to the thermal bonding being pattern embossing. Selection of a particular thermal bonding method would have been within purview of the skilled artisan. However, it would have been obvious to use pattern embossing because such is known in the art, as taught by Kaiser (column 2, lines 15-17).

17. Claims 12-13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pike et al. or Srinivasan et al.

Regarding claims 12-13, selection of the amount of shrinkage would have been within purview of the skilled artisan at the time the invention was made.

Regarding claim 17, the addition of fillers to fibrous materials is well known and conventional in the art. It would have been obvious to the skilled artisan to add fillers to one of the components of Pike or Srinivasan because this allows for the manipulation of the properties of the fibers.

18. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan et al. in view of Pike et al.

Regarding claim 18, Srinivasan teaches the first component being polyethylene but is silent as it being a random copolymer. Selection of a particular material would have been within purview of the skilled artisan. However, it would have been obvious to use a random copolymer because such is known in the art, as taught by Pike (p. 5, lines 30-31).

Regarding claim 20, Srinivasan is silent as to the components being melt spun. It would have been obvious to melt spin the components because such is known in the art, as taught by Pike (p. 3, lines 34-35), and this allows the fibers to be continuously extruded.

***Double Patenting***

19. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

20. Claims 1-4, 7-15, 17-19, 24-26, and 28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5, 6-10, 16-17, 24, and 27-29 of copending Application No. 09/871,171. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application encompass all of the limitations recited in the claims of the present invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

21. Claim 20 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 24 and 29 of copending Application No. 09/871,171 in view of Pike et al.

Applicants are directed to discussion of this reference above.

This is a provisional obviousness-type double patenting rejection.

22. Claims 21-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 24 and 29 of copending Application No. 09/871,171 in view of Smith.

Applicants are directed to discussion of this reference above..

This is a provisional obviousness-type double patenting rejection.

23. Claim 29 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7 of copending Application No. 09/871,171 in view of Kaiser et al.

Applicants are directed to discussion of this reference above.

This is a provisional obviousness-type double patenting rejection.

***Allowable Subject Matter***

24. Claims 5, 16, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 5, the prior art fails to teach or suggest producing a structured composite material for accommodating passage of fluids comprising creping the composite material prior to shrinking.

Regarding claim 16, the prior art fails to teach or suggest producing a structured heterogeneous material for accommodating passage of fluids comprising creping the heterogeneous material prior to heating.

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Regarding claim 27, the prior art fails to teach or suggest producing a structured composite material for accommodating passage of fluids comprising creping the first layer before the second layer is applied thereto.

US 3925127 to Yoshioka teaches forming a cap seal for articles such as a wine bottle by bonding a first film having a first heat shrinkage extent to a second film having a second heat shrinkage extent different from that of the first to form a composite, creping the composite, and shrinking the creped composite (column 1, lines 38-46; column 8, lines 44-68). The skilled artisan would have readily appreciated that the composite of Yoshioka is not capable of passing fluids through it and the skilled artisan would not be motivated to modify the composite of Yoshioka to do such.

US 3214323, US 3925127, US 3546056 all teach forming a composite by bonding a creped tissue paper web to a shrinkable nonwoven web and shrinking the nonwoven after bonding. However, these references are directed to composites that are used as absorbent articles (fluids do not pass through) and/or composites having tissue paper webs that do not have a heat shrinkage extent different from the nonwoven web.

25. Claim 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Regarding claim 6, the prior art fails to teach or suggest producing a structured composite material for accommodating passage of fluids comprising creping the first layer before bonding the second layer thereto to stabilize the first layer. See paragraph 24 above.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **703-305-5419**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jessica L. Rossi  
Patent Examiner  
Art Unit 1733



jlr  
June 2, 2003



**SAM CHUAN YAO**  
**PRIMARY EXAMINER**